

ABSTRACT OF THE DISCLOSURE

A video field rate persistence is provided for a video waveform display where multiple video components are displayed simultaneously, one component being updated per field interval. A persistence count is assigned 5 to each pixel in a circular field buffer which is divided equally into a number of sub-buffers representing a portion of a display raster, one for each component. The persistence count is updated for each update of the circular field buffer with the pixel values being maintained until the persistence count equals a maximum value, at which point the pixel values for that component 10 are updated with new pixel values. In this manner the display pixels for each component are updated every X video fields and are maintained at their prior values between updates to provide a flicker free display without temporal separation.